## INVASIVE SPECIES MANAGEMENT WITH VOLUNTEERS 2011 PROJECT PROPOSAL

Name of Project: Wetland Invasive Plant Control, Ridgefield NWR

Refuge/Wetland Management District: Ridgefield NWR, Clark County, Washington

Project Description: This project would expand survey, control, and monitoring efforts to detect new wetland invasive plant threats and reduce the accumulation of recently documented populations. Primary target species will be ricefield bulrush, fragrant water lily, yellow water iris, purple loosestrife, indigobush, reed canarygrass, and new species as discovered. In 2010, early detection surveys found single new occurrences of pampas grass and meadow knapweed, and two new occurrences of purple loosestrife along the refuge shoreline. Rapid response treated these occurrences. Additional yellow water iris occurrences were found in new areas surveyed. In addition to continued annual searches, expanded surveys are needed along nearly 20 miles of refuge slough and river shoreline to document the extent of indigobush and detect any new locations of purple loosestrife and yellow water iris. Ricefield bulrush needs comprehensive annual control to contain this plant to the refuge and continue reducing the population through hand pulling, spraying, and tilling to reduce the seed bank. In addition, fragrant water lily, first discovered over much of a 12-acre floodplain pond during surveys in 2008, needs further control and early detection surveys downstream to prevent spread into tidal waters. Yellow water iris needs control on many documented occurrences, and purple loosestrife needs constant pressure to prevent spread until the seed bank is exhausted. The Refuge has developed volunteers as plant hunters, crews, and herbicide applicators to survey, control, and rapidly respond to new occurrences. Funds are requested for a Restoration Coordinator through the Friends of Ridgefield NWR to lead work and recruit volunteers. Funds will be obligated in FY 2011. The project will take place from April 1, 2011 - March 30, 2012.

Crews will pull and dig invasive plants. Applicators will treat invasives by boat, ATV, and backpack to avoid non-target impacts and allow re-colonization by other preferred plants. Plant hunters will search and map occurrences for entry by GPS.

<u>Friends Groups, Volunteers and Other Partners</u>: Friends of Ridgefield NWR, The City of Ridgefield, Gee Creek Enhancement Committee, and community volunteers.

<u>Public Outreach and/or Environmental Education</u>: Volunteer events will be publicized through local newspaper and web resources. Work events will include field education regarding native habitats and invasive plant impacts. Plant hunters will receive annual training and volunteer applicators will receive license recertification and applicator training. An invasive plant handout will be made available.

<u>Post-treatment Monitoring</u>: Areas treated will be monitored for at least two years by the Coordinator and Refuge staff to measure success. Any survival of invasive plants treated will be re-treated by herbicide or hand-pulling depending on the size of the plant and encroachment level. Photopoints will be repeated and new points established to document the degree of treatment success, and long-term progress will be monitored by comparing GPS location mapping. Ricefield bulrush success will be monitored long-term monitoring plots established in 2002, two spray/disk treatment transects established in 2010, and by recording and mapping the number of plants pulled annually per wetland.

<u>Criteria for Project Success</u>: The Coordinator and volunteer invasive plant hunters will survey 1,000 acres for ED/RR of invasive plant species. Approximately 84 acres of target invasive plants will be spot treated: 44 acres through pulling/digging with volunteer crews and 40 acres with herbicide treatment by the Coordinator and licensed volunteer herbicide applicators. Control work will prevent seed set, and reduce invasive occurrences treated by an estimated 70%. Approximately 400 volunteer hours are

expected. Grant funds are needed to maintain the momentum of control work over the last 4 years and accomplish objectives in the Refuge's Comprehensive Conservation Plan. Funds awarded will also provide partial match for a current National Fish and Wildlife Foundation private funding grant.

## **Budget**:

Salaries and Benefits (Restoration/Volunteer Coordinator)	\$20,000.00
TOTAL requested	\$20,000.00

2/3/11